

AMENDMENTS TO THE CLAIMS

1-3. (Canceled)

4. (Currently Amended) A liquid detoxification method for purifying a liquid by removing microbes ~~in untreated~~ from the liquid, said liquid detoxification method comprising ~~steps for~~:

applying a microbe-separation treatment by filtration or centrifugal separation for removing comparatively large microbes present in ~~said~~ the liquid, said applying of the microbe-separation treatment by filtration ~~being performed by comprising~~ running ~~said~~ the liquid through a filter ~~or the like~~;

applying either one of chlorination or oxidization, said applying of the chlorination ~~being performed by comprising~~ producing a chlorine-containing substance from ~~said~~ the liquid and feeding ~~said~~ the chlorine-containing substance into ~~said~~ the liquid to thereby kill microbes, and said applying of the oxidization ~~being performed by comprising~~ adding an oxidizing substance to ~~said~~ the liquid; and

storing treated liquid into a tank for treated liquid.

5. (Currently Amended) The liquid detoxification method according to claim 4, further ~~comprising a step for~~ comprising:

applying a mechanical-treatment to ~~said~~ the liquid for damaging microbes therein to thereby ~~to~~ kill microbes before or after ~~said step for~~ applying of the a microbe-separation treatment.

6-9. (Canceled)

10. (Currently Amended) A detoxification method for purifying ~~untreated~~ seawater by removing microbes ~~in untreated~~ from the seawater, said detoxification method comprising ~~steps for~~:

applying a microbe-separation treatment by filtration or centrifugal separation for removing comparatively large microbes present in ~~said~~ the seawater, said applying of the micro-separation

~~treatment by filtration comprising being performed by running said the~~ seawater through a filter ~~or the like;~~

applying either one of chlorination or oxidization, said applying of the chlorination ~~being performed by comprising~~ producing a chlorine-containing substance from ~~said the~~ seawater and adding the chlorine-containing substance into ~~said the~~ seawater to thereby kill microbes, and applying of said oxidization ~~comprising being performed by~~ adding an oxidizing substance to ~~said the~~ seawater; and

storing treated seawater into a ballast water tank.

11-14. (Canceled)

15. (Currently Amended) A detoxification apparatus for purifying a liquid by removing microbes ~~in untreated from the liquid containing untreated seawater~~, said detoxification apparatus comprising:

a microbe-separation unit that applies a microbe-separation treatment by filtration or centrifugal separation for removing comparatively large microbes present in ~~said the~~ liquid, ~~the said~~ filtration being performed by running ~~said the~~ liquid through a filter ~~or the like;~~

either one of chlorination means or oxidization means, said chlorination means for producing a chlorine-containing substance from ~~said the~~ liquid and feeding ~~said the~~ chlorine-containing substance into ~~said the~~ liquid to thereby kill microbes, and said oxidization means for adding an oxidizing substance to ~~said the~~ liquid; and

a tank for storing treated liquid.

16. (Currently Amended) The detoxification apparatus ~~for purifying liquid~~ according to claim 15, further comprising:

a mechanical treatment unit for applying a mechanical treatment to ~~said the~~ liquid to damage and kill microbes present in ~~said the~~ liquid before or after said microbe-separation unit applies the microbe-separation treatment.

17-21. (Canceled)

22. (Currently Amended) A detoxification method for purifying seawater stored in a ballast water tank by removing microbes from the ~~in seawater stored in a ballast water tank~~, said detoxification method comprising steps for:

applying a microbe-separation treatment by filtration or centrifugal separation for removing comparatively large microbes present in ~~said~~ seawater, said applying of the microbe-separation treatment by filtration comprising being performed by running said the seawater through a filter ~~or the like~~;

applying either one of chlorination or oxidization, said applying of the chlorination being performed by comprising producing a chlorine-containing substance from ~~said the~~ seawater and feeding ~~said the~~ chlorine-containing substance into ~~said the~~ seawater to thereby kill microbes, and said applying of the oxidization being performed by comprising adding an oxidizing substance to ~~said the~~ seawater; and

discharging treated seawater out of ~~said the~~ ballast water tank.

23. (Currently Amended) A detoxification method for purifying seawater stored in a ballast water tank by removing microbes ~~in~~ from the ~~seawater stored in a ballast water tank~~, said detoxification method comprising steps for:

applying a microbe-separation treatment by filtration or centrifugal separation for removing comparatively large microbes present in ~~said the~~ seawater, said applying of the microbe-separation treatment by filtration comprising being performed by running said the seawater through a filter ~~or the like~~;

applying either one of chlorination or oxidization, said applying of the chlorination comprising being performed by producing a chlorine-containing substance from ~~said the~~ seawater and feeding ~~said the~~ chlorine-containing substance into the ~~said~~ seawater to thereby kill microbes, and said applying of the oxidization comprising being performed by adding an oxidizing substance to the ~~said~~ seawater; and

circulating ~~said the~~ seawater to ~~said the~~ ballast water tank.

24. **(Currently Amended)** The detoxification method ~~for purifying seawater~~ according to claim 22, further ~~comprising a step for~~ comprising:

applying a mechanical-treatment to ~~said the~~ seawater for damaging microbes in ~~said the~~ seawater to thereby to kill microbes before or after ~~said step for~~ applying of the microbe-separation treatment.

25. **(Currently Amended)** The detoxification method ~~for purifying seawater~~ according to claim 22,

wherein ~~said~~ applying of the chlorination comprises applying the chlorination is performed in an electrolytic circulation system in which all or part of ~~said the~~ seawater stored in ~~said the~~ ballast water tank is introduced into a storing tank and circulated through a circulation line between ~~said the~~ storing tank and an electrolyzer for electrolyzing ~~said the~~ seawater to thereby ~~to~~ obtain the chlorine-containing substance, and ~~said~~ applying of the microbe-separation ~~microbe separation treatment is performed~~ comprises applying the microbe-separation treatment to ~~said the~~ seawater chlorinated in ~~said~~ applying of the electrolytic circulation system chlorination.

26. **(Currently Amended)** The detoxification method ~~for purifying seawater~~ according to claim 22,

wherein ~~said the~~ chlorine-containing substance is composed by chlorine, sodium hypochlorite, sodium chlorite, chloric acid, or their ions or sodium chloride.

27-32. **(Canceled)**

33. **(Currently Amended)** A detoxification apparatus for purifying seawater stored in a ballast water tank by removing microbes from the ~~in~~ seawater, ~~said~~ detoxification apparatus comprising:

a microbe-separation unit that applies a microbe-separation treatment by filtration or centrifugal separation for removing comparatively large microbes present in ~~said the~~ seawater, ~~said~~ the filtration being performed by running ~~said the~~ seawater through a filter ~~or the like~~;

either one of chlorination means or oxidization means, said chlorination means for producing a chlorine-containing substance from ~~said~~ the seawater and feeding ~~said~~ the chlorine-containing substance into ~~said~~ the seawater to thereby kill microbes, and said oxidization means for adding an oxidizing substance to ~~said~~ the seawater; and

wherein ~~said~~ the seawater previously treated in said microbe-separation unit and said chlorination means or said oxidization means is discharged out of ~~said~~ the ballast water tank.

34. (Currently Amended) A detoxification apparatus for purifying seawater stored in a ballast water tank by removing microbes in the seawater, said detoxification apparatus comprising:

a microbe-separation unit that applies a microbe-separation treatment by filtration or centrifugal separation for removing comparatively large microbes present in ~~said~~ the seawater, the ~~said~~ filtration being performed by running ~~said~~ the seawater through a filter ~~or the like~~;

either one of chlorination means or oxidization means, said chlorination means for producing a chlorine-containing substance from ~~said~~ the seawater and feeding ~~said~~ the chlorine-containing substance into ~~said~~ the seawater to thereby kill microbes, and said oxidization means for adding an oxidizing substance to ~~said~~ the seawater; and

wherein ~~said~~ the seawater previously treated in said microbe-separation unit and said chlorination means or said oxidization means is circulated to ~~said~~ the ballast water tank.

35. (Currently Amended) The detoxification apparatus ~~for purifying seawater~~ according to claim 33, ~~further comprising~~ comprising:

a mechanical treatment unit for applying a mechanical treatment to ~~said~~ the seawater to damage and kill microbes present ~~therein in~~ said mechanical treatment unit being located downstream or upstream of said microbe-separation unit.

36-53. (Canceled)

54. (Currently Amended) The detoxification method ~~for purifying seawater~~ according to claim 23,

~~further comprising a step for~~ comprising:

applying a mechanical-treatment to ~~said~~ the seawater for damaging microbes in ~~said~~ the seawater thereby to kill microbes before or after ~~said step for~~ applying of the microbe-separation treatment.

55. **(Currently Amended)** The detoxification method ~~for purifying seawater~~ according to claim 23,

wherein ~~said~~ applying of the chlorination is performed in comprises applying the chlorination in an electrolytic circulation system in which all or part of ~~said~~ the seawater stored in ~~said~~ the ballast water tank is introduced into a storing tank and circulated through a circulation line between ~~said~~ the storing tank and an electrolyzer for electrolyzing ~~said~~ the seawater to thereby to obtain the chlorine-containing substance, and ~~said~~ applying of the microbe-separation ~~microbe-separation treatment is performed to said~~ comprises applying the microbe-separation treatment to the seawater chlorinated in ~~said electrolytic circulation system~~ applying of the chlorination.

56. **(Currently Amended)** The detoxification method ~~for purifying seawater~~ according to claim 23,

wherein ~~said~~ the chlorine-containing substance is composed by chlorine, sodium hypochlorite, sodium chlorite, chloric acid, or their ions or sodium chloride.

57-60. **(Canceled)**

61. **(Currently Amended)** The detoxification apparatus ~~for purifying seawater~~ according to claim 34, ~~further comprising~~ comprising:

a mechanical treatment unit for applying a mechanical treatment to ~~said~~ the seawater to damage and kill microbes present ~~therein~~ therein, said mechanical treatment unit being located in downstream or upstream of said microbe-separation unit.

62. **(New)** The liquid detoxification method according to claim 4, wherein ~~said~~ applying of the microbe-separation treatment comprises applying the microbe-separation treatment by filtration.